

Application No.: 10/564,754

REMARKS

The Examiner objects to the title of the invention as allegedly being non-descriptive. It is respectfully submitted that the enclosed amendment obviates this issue. Accordingly, it is respectfully requested that this objection be withdrawn.

Claims 1-18 are pending, with claims 1 and 11 being independent.

Turning to the cited prior art, the Examiner alleges that Yudasaka et al. '945 ("Yudasaka"), Narayan '504 ("Narayan"), Duthaler et al. '584 ("Duthaler") and Klauk et al. '426 ("Klauk") are relevant to the independent claims under 35 U.S.C. § 102. As a preliminary matter, it is noted that the Examiner rejected the same claims multiple times over different prior art, which is improper in that it is unnecessarily cumulative. As set forth in MPEP § 706.02, under the subtitle "Choice of Prior Art; Best Available," the Examiner should confine a prior art rejection "strictly to the best available art." It is respectfully requested that if any future prior art rejection is made, the Examiner limit the number of cumulative rejections for the sake of brevity in order to reduce issues and expedite prosecution.

In any event, it is respectfully submitted that none of the cited prior art discloses or suggests the claimed combinations recited in claims 1 and 11. Claim 1 recites in pertinent part, "wherein said semiconductor layer is made of composite material, said composite material comprises organic semiconductive material and at least one kind of inorganic material particles dispersed inside the organic semiconductive material, and a content rate of said particles in said semiconductor layer is more than 0 volume% and not more than 60 volume%." Claim 11 recites a similar feature in method format.

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Turning to the cited prior art, with respect to Yudasaka, the Examiner's position is unclear and appears to be improper. The Examiner relies on the device shown in Figure 19 of Yudasaka for the claimed elements, but then relies on col.'s 13-14 thereof as disclosing the respective materials therefor. However, col.'s 13-14 appear to be silent as to an organic/inorganic composite material. Further, col.'s 13-14 are NOT related to the embodiment disclosed in Figure 19 relied on by the Examiner. In this regard, the manufacturing process for the device shown in Figure 19, which is disclosed as a second embodiment distinct from that disclosed in col.'s 13-14, is described at col.'s 21-22 which do not appear to suggest any organic/inorganic composite material for any of the semiconductor layers in the device shown in Figure 19.

Nonetheless, Yudasaka does not disclose or suggest "a content rate of said particles in said semiconductor layer is more than 0 volume% and not more than 60 volume%." Indeed, the Examiner does not rely on Yudasaka as disclosing this feature of the present invention. Accordingly, Yudasaka does not anticipate claims 1 and 11, nor any claim dependent thereon.

With respect to Duthaler, the Examiner alleges that the semiconductor layer 70 is an organic material including inorganic particles based on paragraph 95. However, paragraph 95 does not appear to attribute the material teachings therein specifically to the semiconductor layer 70. Moreover, although paragraph 95 appears to disclose organic and inorganic material, it does not appear to suggest the combination thereof to form a single composite material. Rather, paragraph 95 of Duthaler appears to suggest separate, distinct semiconductors in the alternative of either an organic semiconductor or an inorganic semiconductor but not the composite combination thereof. Indeed, Duthaler appears to disclose only that the semiconductor layer 70 is made of silicon, but does not suggest that the silicon semiconductor layer 70 is made of

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composite material comprising organic semiconductive material and at least one kind of inorganic material particles dispersed inside the organic semiconductive material.

Nonetheless, even assuming *arguendo* that the Examiner's above-referenced allegations are proper, Duthaler still does not disclose or suggest "a content rate of said particles in said semiconductor layer is more than 0 volume% and not more than 60 volume%." On page 13 of the Office Action, the Examiner merely concludes that Duthaler discloses the aforementioned feature without identifying precisely where Duthaler allegedly does so. Rather, the Examiner merely refers to a very broad, wide ranging portion of Duthaler (i.e., paragraphs 50-68 and 92-96) without identifying which specific portion within the generally cited portions is allegedly relevant to the aforementioned feature. Indeed, it is respectfully submitted that the cited portions of Duthaler appear to be completely silent as to the content rate of the alleged particles.

When imposing a rejection under 35 U.S.C. §102, the Examiner is required to point to "page and line" wherein an applied reference is perceived to identically disclose each feature of a claimed invention. *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). In the instant case, the Examiner has failed to do so as the Examiner merely concludes generally that a very large portion of Duthaler is allegedly relevant to several features of the claimed invention without identifying which specific portions of Duthaler are allegedly relevant to each of the claimed features, respectively.

In any event, Duthaler does not appear to expressly disclose the claimed content rate nor is it inherent ("inherency may not be established by probabilities or possibilities," *Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999)). Based on the foregoing, it is respectfully submitted that Duthaler does not anticipate claims 1 and 11, nor any claim dependent thereon.

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With respect to Klauk, on page 6 of the Office Action, the Examiner again merely *concludes* that paragraphs 66-68 of Klauk allegedly disclose "a content rate of said particles in said semiconductor layer is more than 0 volume% and not more than 60 volume%." However, contrary to the Examiner's assertion, it appears that paragraphs 66-68 of Klauk are completely silent as to the content rate of the alleged particles much less suggestive of the specific content rate embodied by claims 1 and 11.

With respect to Narayan, on pages 9-10 of the Office Action, the Examiner again merely *concludes* that paragraphs 23-32 of Narayan allegedly disclose "a content rate of said particles in said semiconductor layer is more than 0 volume% and not more than 60 volume%." However, contrary to the Examiner's assertion, it appears that paragraphs 23-32 of Narayan are completely silent as to the specific content rate of the alleged particles.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed, either expressly or inherently (noting that "inherency may not be established by probabilities or possibilities", *Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999)), in a single prior art reference, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the forgoing, it is submitted that the cited prior art does not anticipate claims 1 and 11, nor any claim dependent thereon.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as the independent claims are patentable

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for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

Based on the foregoing, it is respectfully submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejections under 35 U.S.C. § 102/103 be withdrawn.

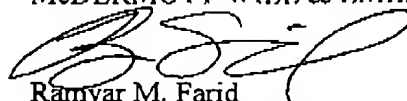
CONCLUSION

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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